Book of the monthPhilosophy for Medicine

'We have our philosophical persons, to make modern and familiar, things supernatural and causeless'— William Shakespeare

'When I study philosophical works I feel I am swallowing something which I do not have in my mouth'—Albert Einstein

In 1981, two American philosophers, Edmund Pellegrino and David Thomasma, in *A Philosophical Basis of Medical Practice*, ¹ suggested that the crisis of modern medicine lies in the lack of a suitable philosophy of medical practice whereby 'non-measurable clinical factors and values can be treated with the same attention as clinical indicators of disease'. In short, they held that the only solution is the search for a philosophy of medicine developed from the practice of medicine itself and not from the external imposition of philosophies which already exist; in particular, they did not believe that the philosophies of science which had evolved over many years were germane to the increasingly complex issues of medical practice in the 20th century.

It is only necessary to read Peter Medawar's delightful essay 'Is the scientific paper a fraud?'2 to appreciate that, although philosophers like Russell and Popper had a considerable influence in defining the nature of the scientific endeavour in the 20th century, their conclusions often appeared to be at variance with the day-to-day practice of research. The published papers based on the Herbert Spencer lectures given at the University of Oxford in 1979, entitled Scientific Explanation, suggest that the philosophy and practice of science are not entirely happy bedfellows. In summarizing the lectures the editor, A F Heath, pointed out that those by the scientists displayed an absence of doubt and suspension of disbelief, while the philosophers expressed considerable uncertainty about the validity of the accounts which the scientists had given of their activities. And he went even further, suggesting that the two most influential philosophies of science of the 20th century are self-refuting—not the most encouraging of messages for proponents of a new philosophy of medicine!

Although it could be argued that there has been little movement towards evolving an all-embracing philosophical basis of medical practice since the appearance of Pellegrino and Thomasma's stimulating book, at least as evidenced by the undoubted progress that has been made in bioethics over recent years, a more focused application of the disciplined thinking of philosophers has had much to offer the current medical scene. Onora O'Neill, for example, has provided an invaluable contemporary background to defining some of the problems of medical ethics in the light of duty or rights-based approaches and utilitarianism.4 Although these principles have had to be applied with considerable flexibility, they have formed a broad framework for discussions on a variety of topics including confidentiality, conflicting rights, rationing and prioritizing of healthcare, inequalities of care, and many other related issues. Also, by combining clarity of thought with good common sense about public expectations, the work of philosophers such as Mary Warnock⁵ has been one of the major reasons for the relative success of the UK in handling such delicate issues as embryo research, cloning and stemcell therapy. Indeed, on bodies like the Nuffield Bioethics Council and some of the government regulatory committees, the philosophers who joined the scientists and lay people who were grappling with the difficult decisions raised by modern biotechnology were of inestimable value in better defining the questions involved, not to mention generating a more sensible basis for their solution. And, on the broader issues of bioethics, the writings of philosophers and historians of science—Dan Brock,⁶ Jonathan Glover⁷ and Daniel Kevles, 8 for example—have provided a valuable platform on which to debate the extent to which society may wish to see the power of human genetics harnessed in the future.

But although there has been wide discussion about the shortcomings of the medical profession it seems unlikely, given the extraordinary rate of change and diversity of problems in the fields of biomedical research and patient care, that an all-embracing philosophical basis for medical practice, as outlined by Pellegrino and Thomasma, will become a reality in the foreseeable future. Steven Pinker's book The Blank Slate, 9 which, incidentally, gained its name from a passage in John Locke's An Essay Concerning Human Understanding, emphasizes the rapidly changing concepts of human nature as they are becoming more clearly defined by the neurosciences, genetics, evolutionary psychology and developmental biology. This new and rapidly changing field alone offers enormous challenges for the philosophical analysis of the human state. The exploration of the human genome and the increasing evidence that we are what we are as a result of our genetic make-up, our current environment and the long history of the cultural milieu that has been handed down to us, offers a further example of the remarkable complexity of human beings. When the added stress of illness is thrown in for good measure, the concept of a unifying philosophical basis for the many facets of illness and its management appears increasingly unreal.

There is no doubt, however, that we will have to prepare our students much more effectively for the increasing problems of biological complexity that will dog them throughout their careers. The clinician's Occam's razor—'plurality of causes and diseases is not to be assumed without necessity'1—will no longer do. This issue was summed up recently: 'the principal problem for those who educate our doctors in the future is how on the one hand, to encourage a lifelong attitude of critical, scientific thinking to the management of illness and, on the other, to recognise that moment when the scientific approach, because of ignorance, has reached its limits and must be replaced by sympathetic empiricism'. 10 This aim will only be achieved by developing an increased facility for communication and listening, by sustained discussion of the ethical, social and pastoral aspects of medical practice, and by training aimed at maintaining a functional level of scientific literacy in a discipline of ever-growing complexity. It is vital that our young doctors develop a frame of mind in which they continue to tussle with these issues throughout their

A new work, Philosophy for Medicine, 11 presumably directed towards some of these goals, consists of a series of lectures given at a seminar in Wales in 2001. As an act of reader-friendliness, the theme of each chapter is illustrated by short inserts which describe episodes in the life of a surgical registrar who appears to have had his thumb almost amputated by an assistant in the operating theatre. After an introduction to what is meant by the 'philosophy of medicine', subsequent chapters cover the clinical encounter, questions of knowledge and certainty, guilt, aesthetics, the changing philosophies of medicine over the centuries, and some aspects of medical ethics. In addition, there is an interesting excursion into the healing arts in different cultures. Many of the topics that are discussed cover well-trodden ground—for example, the uniqueness of the patient/doctor relationship; communication skills; reductive and mechanistic approaches to sick people. While many more questions are raised than answers offered and at first glance doctors may not find much here that is new, the way the issues are presented in clinical settings should make this useful background material for courses in bioethics and communication skills.

However, the central question raised by *Philosophy for Medicine* is to what extent this field should assume a separate new discipline to be added to the rapidly expanding curriculum for medical students, directed at making them into more rounded and caring individuals. They will certainly not want yet another burden added to their work as doctors. In this context, they may feel that there is little new and even less that is helpful to them in at least some sections of *Philosophy for Medicine*. But this is not to say that there is no place for philosophy in the evolving field of medical practice.

There are undoubtedly some aspects of medicine, at least as presented in Philosophy for Medicine, for which it is difficult to perceive an immediate practical role for the approaches of philosophy—examples being the complexities of the doctor/patient relationship and the ability to listen and to evolve a holistic view of the prevention and management of disease. Similarly, unless the current trend in medical education further undermines the teaching of the science on which medicine is based, students should be adequately prepared to cope with the doubts and uncertainties of their work, even to the extent of understanding the clinical limitations of evidence-based medicine. On the other hand, the biological sciences and the very scope of modern practice are raising complex new ethical and political issues that change almost day by day. And, as we have seen, philosophers are playing an increasingly important role in helping to define and address these problems. It is during the training of students and doctors about how to recognize and grapple with them that the approaches of philosophers could well be introduced; these approaches, if well presented, will then be perceived as valuable assets towards the clarification of the day-to-day problems of a doctor's life as well as broader political issues such as the prioritization of healthcare. At the same time, philosophers will continue their important work in training bioethicists and in aiding decision-making at national and international levels. Wider philosophical inquiry into the process of healthcare, as with science, can be left in the safer hands of philosophers.

It could be argued that this narrow, highly selective and rather pragmatic view of the relationship between philosophy and medicine ignores the broader value of a knowledge of philosophy as part of the general education of a physician. Undoubtedly, many students of previous generations had their lives enriched by reading Bertrand Russell's Wisdom of the West, 12 and young people of today may find similar satisfaction in acquainting themselves with popular works on philosophy such as Simon Blackburn's Think. 13 But medicine is of necessity a pragmatic profession; unless the principles of philosophy are introduced to its students linked to questions of immediate relevance to their patients or communities, and even more importantly, in a language and context in which they can perceive the possibility of solutions to the protean problems of sick people, the value of this disciplined way of approaching the complexities of medical practice may well be lost on them.

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Familial Breast and Ovarian Cancer: Genetics, Screening and Management

Editors: Patrick J Morrison, Shirley V Hodgson, Neva E Haites

401 pp Price: £70 ISBN 0-521-80373-X Cambridge: Cambridge University Press

Referrals of individuals worried about their family history of cancer now make up about half the workload of regional genetic departments. I was therefore delighted to receive a copy of this book for review. The pleasure was shared by other members of the cancer genetics team who found it immediately useful, thus delaying my critique. The book has its origins in a European Union funded demonstration project entitled 'familial breast cancer: audit of a new development in medical practice in European centres', and the editors represent three of the eleven centres involved. Not all the seventeen chapters are written by people in the EU project; the discussion of how cancer genetics can help in patient care includes contributions from centres the world over.

The book is divided into three sections—molecular biology and natural history; screening; and management. Every aspect relevant to the management of individuals in families with breast and/or ovarian cancer is addressed, and the usefulness of the text is such that I found myself reading it from cover to cover. No chapter is weak; and, for me, the ones that stood out as particularly helpful were the six in the screening section and that on the ethical, social and insurance issues of breast cancer genetics. The only negative point, when reading the book as I did, was that some of the ground is covered repeatedly. However, if the book is used as a reference source—for dipping into specific sections—this can be a strength rather than a weakness.

Who should buy the book? I recommend it to all clinical geneticists working in cancer genetics, to breast surgeons and gynaecologists who deal with these cancers, and to radiologists involved in screening programmes. It provides an excellent review of the state of the art, with all the relevant references. The last two chapters give a taste of what may happen in the future, in terms of gene therapy and further developments in genetics and screening. New surveillance techniques and therapeutic measures, as they emerge, will need to be evaluated in large cohorts of affected and at-risk individuals. The only way this will be achieved is by multicentre collaborations; to this end, the European Biomed 2 group has now evolved into the International Collaborative Group—Familial Breast Ovarian Cancer (IVG-FBOC).

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St Mary's: the History of a London Teaching Hospital

E A Heaman

451 pp Price £15 ISBN 0-85323-978-9 Liverpool: Liverpool University Press

St Mary's Paddington, the first institution to be conceived from the start as a teaching hospital with a medical school attached, was founded in 1851 from small philanthropic beginnings based on 'Christian and genteel values', in an area teeming with sailors and prostitutes. In the early days, informal teaching was given to about 40 students in the basic sciences, medicine, surgery and *materia medica*. These beginnings and what happened thereafter are ably told in E A Heaman's new *History*.

Between the late Victorian period and the First World War, doctors took over control of administration from the

founding governors and new techniques and therapies emerged. This period was dominated by Almroth Wright, George Bernard Shaw's model for Colenso Ridgeon in *The Doctor's Dilemma*, who was knighted for his work on typhoid vaccine. In 1912 Wright delegated the teaching of bacteriology to his assistant Alexander Fleming.

Far-reaching changes at St Mary's followed the appointment of Charles Wilson as dean of the medical school in the early 1920s. Although it was he who persuaded the medical staff to institute academic departments of medicine and surgery, he is perhaps more widely remembered for his belief that the ideal characteristics for entry to the medical profession were to be found in rugby players from public (i.e. private) schools. One of the school's non-rugby sporting heroes was Roger Bannister, the first person to run a sub-four-minute mile—an achievement whose 50th anniversary we celebrate this year. Sir Roger, who won separate distinction as a neurologist, contributes a foreword. Strangely, Elsbeth Heaman makes no mention of probably the greatest allround sportsman ever at St Mary's—'Tuppy' Owen-Smith, a Capetonian who went to the hospital with a triple blue from Oxford (cricket, rugby, boxing) and played cricket and rugby at international level. With the Second World War came the appointment of George Pickering to the chair of medicine, to which he brought an ethos of research in a hospital previously entrenched in clinical teaching. Among the notable doctors lost by St Mary's to the war were Ivan Jacklin and Peter McCrae, both of whom perished in the notorious Murmansk convoys. Towards the end of the war talk began to turn to the Beveridge Report of December 1942. Earlier in the same year the socialist gynaecologist Aleck Bourne had given a series of lectures on 'The Health of the Future'. Bourne had come to the public eye in 1938 when he terminated the pregnancy of a 14-year-old girl who had been raped by a guardsman—an event that ultimately led to a change in the laws on abortion. The introduction of the Emergency Medical Service, combined with military service for all newly qualified doctors who were fit for it, may well have made young clinicians more receptive to the National Health Service in 1948 than their senior colleagues, many of whom were opposed to it in principle. The Government needed the good will and cooperation of the medical profession and, in the words of Elsbeth Heaman, 'That good will was marshalled and delivered by Charles Wilson, later Lord Moran'.

In 1944 there was a major crisis when the Goodenough Report decreed that a teaching hospital must have at least 700 beds—twice the number at St Mary's. In the end, this difficulty was overcome by incorporating several specialist hospitals from the area, and the school became 'scientized' by the creation of new academic departments and the introduction of new technologies. A signal event at the

hospital that took place, like Bannister's mile, 50 years ago was Felix Eastcott's pioneering carotid endarterectomy.

The main political consequence of the 'scientization' of St Mary's was to be seen during the deanship of Peter Richards (1979–1995)—an era in which nearly all the London teaching hospitals lost their independence. After much controversy, the school merged in 1988 with Imperial College, Richards having persuaded them of the school's high performance in research; indeed, he argued that, head for head, St Mary's outscored Imperial in Nobel Laureates and Fellows of the Royal Society. Elsbeth Heaman believes that Richards achieved 'minimal change with maximum protection'. Not everyone would agree wholeheartedly with this judgment.

Altogether, this *History* offers an enthralling story whose appeal extends far beyond the alumni of St Mary's and Imperial.

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Clinical Paediatric Nephrology

3rd edition

Editors: N Webb, R Postlethwaite

520 pp Price £93.50 ISBN 0-19263287-6 (h/b)

Oxford: Oxford University Press

The strengths of past editions of Clinical Paediatric Nephrology have been comprehensiveness and conciseness. In the latest, the original editor has become the junior—is this where postgraduate medical education is leading us?—the publisher has changed and the menu has expanded to include psychosocial matters, information for families and thirdworld paediatric nephrology. Passé contributors have been dumped and the fresh team is international, multidisciplinary and multiprofessional. The ephebic transformation is dazzling.

Inevitably the evidence-based influence lurks—fine for the routine case but less so and sometimes malign for the diagnostically challenging. Key point boxes summarize the important facts; imaging studies have reproduced well; there is a sprinkling of references to 21st century publications and the index is full and useful—though to print it twice (repeated between pages 16 and 17) does seem otiose. Bouquets? The discussions of nephrotic syndrome, renal tubular conditions (not one of the universal strengths of British nephrology) and acid/base and water (not fluid: fluid=water+electrolytes) and electrolyte disorders are first-rate. So is the contribution on psychosocial care—a jewel within UK paediatric nephrology inspired by the original sole editor Dr Postlethwaite. I was glad to see pollakiuria given a paragraph: it is common and poorly

recognized (hence unnecessary investigations) and medical equivocation can fuel parental anxiety, thus perpetuating it: authoritative firmness is the prescription. Male genital mutilation (circumcision) is discussed sensibly, in particular its medical indication to prevent urinary tract infections. When will its routine and ritual practice be regarded with the same obloquy as mutilation of the female genitalia? Drawbacks? I searched the index in vain for dysuria, frequency, urgency and the other symptoms that lead a child to be presented to a paediatrician and which may or may not be explained by 'organic pathology'-or, more taxing still, may coexist with it. If one digs away they are there—in an excellent chapter on micturition disorders, for example—but post-modern medicine does not yet seem to have reached the paediatric nephrologists; or do they regard themselves as multidisciplinary technicians rather than personal physicians? In its latest guise, this work remains a must for postgraduate examination candidates and many paediatric departments will wish to possess it as a bench tool.

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The Pig-faced Lady of Manchester Square & other Medical Marvels

Jan Bondeson

288 pp Price £8.99 ISBN 0-7524-2968-X (hb)

Stroud: Tempus Publishing

For those interested in the anomalies of the human body Dr Bondeson's latest work offers many examples—a treasure trove of the morbid and unusual and, for the medically inclined, some intriguing case histories. Bondeson has written at least four other books on the bizarre, and the *Pig-faced Lady* is a *tour de force*—highly researched, well illustrated where possible and bringing to life the people affected.

Was the early-nineteenth-century pig-faced lady in the title real or just a hoax? The author's meticulous research cannot find the answer. Her predecessor Tannakin Skinker from Holland, who made her first appearance in London in 1639 where she was hoping to find a husband, was much featured in ballads and songs but she too may have been more legend than fact. Similar stories are explored concerning hairy maidens, one of whom, Julia Pastrana, was reported in a *Lancet* of 1857. Conjoined twins are another area explored. Sometimes these were put on show to provide a living for themselves and their families; thus we have newspaper reports, advertisements and articles in medical journals to substantiate the claims for one body supporting two persons. Probably it is the story of Daniel

Lambert from Leicestershire that will appeal most to the medical world—especially in the light of today's obsession with obesity. An entire chapter is devoted to the 'English fat man', illuminated by the author's own experiences as a senior registrar dealing with primary obesity. Bondeson also tells with enthusiasm the stories of two eighteenth-century giants, the Swede Daniel Cajanus and the Irishman Charles Byrne (whose skeleton is in the Hunterian Museum at the Royal College of Surgeons of England). With clever marketing these men made substantial amounts of money by exploiting their extreme condition as showmen, though both contrived to lead relatively normal lives. Cajanus was a prudent intelligent man; Byrne's intellect was not helped by his habit of drinking at least one large bottle of gin or whisky every day. These chapters on the fat and tall are the most interesting and readable in the book; in his accounts of the King of Poland's Court Dwarf and the Sicilian Fairy (whose skeleton and clothes are likewise at the Royal College of Surgeons of England), Bondeson tells us more about the person behind the abnormality, and does so with great skill. The Dwarf does not emerge as an endearing character.

The other medical marvels will await the reader to be amazed, repulsed or mildly amused; this is a book to dip into and some of the evidence to be taken lightly. If you are fascinated by congenital abnormalities you will be excited. If you are revolted by the whole scene, spare yourself a trip to the bookshop.

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Comprehensive Surgical Management of Congenital Heart Disease

Richard A Jonas

544 pp Price £145 ISBN 1-340-80807-1 (h/b)

London: Arnold

Richard Jonas has performed the remarkable feat of writing, virtually single-handedly, a comprehensive textbook on congenital heart surgery very much based on his own practice. The book is divided into three sections. The first includes a chapter on basic surgical techniques, which is welcome and practical. The same applies to the chapter on biomaterials for congenital cardiac surgery. This section also includes a chapter on anaesthesia and intensive care written by two co-authors. Both are comprehensive and are supported by a very large clinical experience.

In section two, nearly 60 pages are devoted to cardiopulmonary bypass. This emphasis reflects the view of Jonas that cardiopulmonary bypass is a dominant determinant factor of surgical outcomes. It is also a

reflection of the many and important contributions he has made in elucidating the physiopathology of extracorporeal perfusion and organ protection (the brain in particular). The third and main section describes the specific congenital cardiac anomalies in well structured chapters that highlight best current practice, preceded by anatomical and physiological descriptions and ending with a summary of current results from leading institutions. The book is very well written. The illustrations, by Rebekah Dodson, are outstanding. This book is a display of superior individual knowledge-virtually encyclopaedic. The most difficult technical procedures are described with accuracy, in simple terms that reflect the skills and talents of a masterful surgeon. Any congenital cardiac surgeon, any surgical trainee interested in congenital cardiac surgery, will consult this book with great pleasure.

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Traumatic Brain Injury: Rehabilitative Treatment and Case Management

2nd Edition

Editor: Mark J Ashley

800 pp Price: US\$149.95 ISBN 0-8493-1362-7 (h/b)

Boca Raton: CRC Press

Because traumatic brain injury causes an almost limitless range of troubles, Mark Garrison and his contributors, all from North America, concentrate on disorders that are common and persistent. Their target readership includes physicians, allied therapists and case managers, and the book is divided accordingly.

The medical section has ten chapters, of which the most fascinating (to me) is that on vestibular dysfunction—a frequent but often overlooked post-traumatic disorder. An easy-to-follow account of the anatomy, physiology and pathophysiology of the vestibular system is followed by technical descriptions of vestibular investigations that will provide a valuable resource to non-specialists. The chapter concludes with a plain breakdown of the various components integral to vestibular rehabilitation. The authors make clear that, especially in patients with other deficits, the best hope in vestibular rehabilitation will often be symptom control rather than symptom elimination. I also liked the brief chapter on heterotopic ossification, with its account of diagnostic methods and its flow chart to guide treatment. Less high marks go to

the account of post-traumatic epilepsy. There is much information on the side-effect profiles of antiepileptic drugs (AEDs) and we are counselled on the importance of distinguishing seizures from behavioural spells (so as to avoid unnecessary AED prescription and resultant side-effects). The authors discuss when to start an AED and the controversy on this question but offer no clear guidance on the more difficult issue of whether and when to stop—a matter addressed in the UK national guideline, 'Rehabilitation following Acquired Head Injury', published in 2003. I did not enjoy the dense account of neurotransmitters and pharmacology, packed with basic science and of little practical use.

The section on allied health themes includes an update on cognition and language that demands a good understanding of language theory. Much less jargon-laden is a contribution on therapeutic recreation, the origins of which can be traced to Socrates and Plato. Unfortunately, little research has been done on the benefits of exercise and activity specifically related to traumatic brain injury, so the authors have to lean heavily on results in other areas such as spinal cord injury and spina bifida. From these sources they extrapolate possible benefits including improved physical and mental health, higher cognitive functioning, enhanced social integration and better quality of life. The chapter ends by honestly acknowledging that the medical and insurance communities have yet to be convinced. A chapter entitled 'Children and Adolescents: Practical Strategies for School Participation and Transition' is full of valuable insights. It presents examples of cognitive difficulties and resultant classroom behaviours following traumatic brain injury together with specific strategies for dealing with them. To illustrate the principles the progress of 'John', who was injured as a child, is charted to the age of 19.

In part three the best written chapter is an overview on external case management. The fact that it is geared to an American readership does not detract from its value to UK readers in summarizing the roles and responsibilities of a case manager—in particular, the importance of knowing the patient's family dynamics, premorbid personality and interests, the vocational rehabilitation services available, and the possible benefits and sources of funding. The emotional stresses faced by a case manager are not overlooked.

The book is attractively produced and contains some excellent material. As I have indicated, the quality and pertinence vary.

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